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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,133	12/15/2003	Stephen T. Flock	D6462CIP	3622

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EXAMINER

ROANE, AARON F

ART UNIT	PAPER NUMBER
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3739

MAIL DATE	DELIVERY MODE
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03/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/736,133	Applicant(s) FLOCK ET AL.	
	Examiner AARON ROANE	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-40,42-50,70 and 71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-40,42-50,70 and 71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31-40, 42-49 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Flomenbilt et al. (USPN 5,562,641) in view of Rudie (USPN 6,032,078) and further in view of Healy et al. (USPN 5,670,161).

Regarding claims 37, 38, 42, 45 and 71, Flomenbilt et al. disclose a device for the treatment of tissue, comprising: a radiofrequency power supply (see col. 5, lines 27-48); an antenna (62) connected to said radiofrequency power supply; an energy absorbing species (32), see col. 4-5 and figures 1-10. Flomenbilt et al. fail to disclose the antenna is a coil antenna and a reactant. Rudie discloses a catheter device and teaches providing the catheter with an antenna comprising a flat ribbon wire (140) wound into a helical (coil) antenna configuration, in order to delivery RF energy, see col. 9-10 and figures 1-11. Healy et al. disclose a treatment system including a biodegradable stent and teach providing the stent with a coating comprising a drug in order to enhance the therapeutic effects, see col. 10, lines 10-48 and figures 1-5. Therefore at the time of the invention it

would have been obvious to one of ordinary skill in the art to modify the invention of Flomenbilt et al., as taught by Rudie, to provide the catheter with an antenna comprising a flat ribbon wire (electrical conductor) wound into a helical (coil) antenna configuration in order to delivery RF energy, and as further taught by Healy et al., to provide the stent with a coating comprising a drug in order to enhance the therapeutic effects.

Regarding claim 39, Flomenbilt et al. further disclose the device capable of the recited function. The recitation that the substrates are intended use, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, and then it meets the claim. Additionally, Flomenbilt et al. disclose the claimed invention.

Regarding claim 40, Flomenbilt et al. disclose RF energy. Radio frequency (RF) ranges from 3 Hz to 30GHz.

Regarding claim 43, Flomenbilt et al. in view of Healy et al. in further view of Rudie disclose the claimed invention; see Rudie, the solid ribbon wire (140), col. 9-10 and figures 1-11.

Regarding claim 44, Flomenbilt et al. in view of Healy et al. in further view of Rudie disclose the claimed invention. The helical ribbon wire (140) is planar; the

wrapped/coiled helical path of the flat ribbon wire is non planar, see col. 9-10 and figures 1-11.

Regarding claims 46-48, Flomenbilt et al. disclose the claimed invention, as the stent disclosed a) has a non-zero electrical conductivity, b) is inherently either diamagnetic, paramagnetic or ferromagnetic and c) is ionomer, a conducting polymer, an alkali metal, a transition metal, a lanthanide, or a metalloid or a combination thereof, see col. 2, line 62 through col. 7, line 24.

Regarding claim 49, Flomenbilt et al. further disclose the “stent of the can be made of a wide variety of a two-way shape memory alloy such as Ni-Ti binary alloy, known as "nitinol", Ni-Ti-X (X being V, Co, Cu, Fe) ternary alloy, Cu-Al-Ni ternary alloy, or Cu-Zn-Al ternary alloy,” see col. 2, line 62 through col. 3, line 1.

Claims 50 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flomenbilt et al. (USPN 5,562,641) in view of Rudie (USPN 6,032,078) and further in view of Healy et al. (USPN 5,670,161) as applied to claim 37 above, and still further in view of Pinchuk et al. (USPN 6,545,097).

Regarding claims 50 and 70, Flomenbilt et al. in view of Rudie and further in view of Healy et al. disclose the claimed invention except for the a polystyrene encapsulated metal particle. Flomenbilt et al. in view of Rudie and further in view of Healy et al. also fail to disclose the reactant is a protein, a lipid, a nucleic acid, or a carbohydrate. Pinchuk

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et al. disclose a drug delivery composition and method and teach coating stents with polystyrene-polyisobutylene-polystyrene copolymer and paclitaxel in varying ratios in order to vary the rates of drug release see col. 19, line 65 through col. 20, line 14.

Pinchuk et al. also teach a wide variety of therapeutic agents including proteins as candidates for vascular treatments, see col. 11 and 12. Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the invention of Flomenbilt et al. in view of Rudie and further in view of Healy et al., as taught by Pinchuk et al., to coat the stents with polystyrene-polyisobutylene-polystyrene copolymer and paclitaxel in varying ratios in order to vary the rates of drug release, and as also further taught by Pinchuk et al., to provide a wide variety of therapeutic agents including proteins as candidates for vascular treatments.

Response to Arguments

Applicant's arguments with respect to claims 37-40, 42-50, 70 and 71 have been considered but are moot in view of the new ground(s) of rejection.

Although there are new grounds of rejection and Applicant's arguments/remarks are moot, the examiner believes he should comment on one of Applicant's arguments in particular. Applicant's response centers around one major argument and that is none of the references disclose antennas (in particular coiled antennas) that generate alternating magnetic fields. Applicant should note, RF electromagnetic energy delivery or RF electromagnetic radiation (that is disclosed by many of the prior art of record) inherently contains alternating magnetic fields.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON ROANE whose telephone number is (571)272-4771. The examiner can normally be reached on Monday-Thursday 7AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron Roane/
Examiner, Art Unit 3739

/Henry M. Johnson, III/
Primary Examiner, Art Unit 3739